

**Claims:**

1. A gas friction pump, comprising stationary pump-active components (14) and rotatable pump-active components (15) secured on a rotatable rotor shaft (4), wherein the rotor shaft is supported with a bearing (5) at the high-vacuum-side end and a bearing arrangement at a fore-vacuum side end, characterized in that the high-vacuum side bearing is formed as a conventional bearing, and the fore-vacuum side bearing arrangement contains at least one gas bearing.

2. A gas friction pump according to claim 1, characterized in that the shaft is supported at the fore-vacuum side radially with a gas bearing (6) and axially with a conventional bearing (7).

3. A gas friction pump according to claim 1, characterized in that the shaft is supported at the fore-vacuum side axially with a gas bearing (7) and radially with a conventional bearing (6).

4. A gas friction pump according to claim 1, characterized in that the shaft is supported at the fore-vacuum side radially (6) and axially (7) with a gas bearing.

5. A gas friction pump according to claim 1, characterized in that at least one of the bearings is formed as a module.

6. A gas friction pump according to one of the preceding claims, characterized in that the drive (9) is formed as a module.

7. A gas friction pump according to one of the preceding claims, characterized in that the radial bearing (6) and the axial bearing (7) are combined in a module.

8. A gas friction pump according to one of the claims 1 through 4, characterized in that at least one of the bearings (6,7) and the drive (9) are combined in a module.

9. A gas friction pump according to one of preceding claims, characterized in that, at least one of the modules is arranged and secured in a cylindrically formed portion (11) of the pump housing.

10. A gas friction pump according to one of preceding claims, characterized in that between a gas bearing and a low-pressure side, sealing means (11) is provided.

11. A gas friction pump according to one of preceding claims, characterized in that the high-vacuum side bearing is formed as a permanent magnet bearing.